

Biggleswade Urban District

ANNUAL REPORT

ON THE

Health and Sanitary Circumstances

of the District.

For the Year ended Dec, 31st, 1919

BY

J. HUTCHINSON WOOD,

M.B., B.S., M.R.C.S., L.R.C.P., D.P.H.,

MEDICAL OFFICER OF HEALTH.

To the Chairman and Members
OF THE
Biggleswade Urban District Council.

Mr. Chairman and Gentlemen,—

I have the honour to present to you the Report on the Health and Sanitary Circumstances of your district for the year 1919.

It has been written so far as possible to comply with the Memorandum issued by the Ministry of Health.

The question of "Housing" is, I know, receiving your attention ; it is **the** most important matter at present, and, I hope you will soon see some satisfactory result for your labours.

I have the honour to be,

Your obedient Servant,

April, 1920.

J. HUTCHINSON WOOD

SUMMARY OF STATISTICS, 1919.

Area	4647 acres
Estimated Population for calculation of birth-rate	5562
Estimated Population for calculation of death-rate	5339
Population (Census 1911)	5375
Increase of Population 1901—1911	255
Density of Population	a little over 1 person per acre
Number of Inhabited Houses (1911 Census)	1268
Number of Persons per house (at last Census)	1.2
Birth-rate per 1,000 of population	15.82
Death-rate per 1,000 population	15.73
Infantile Death-rate per 1,000 births	113.0
Zymotic Death-rate per 1,000 of population18
Phthisis Death-rate per 1,000 of population	1.31
Tuberculosis (all forms) Death-rate per 1,000 of population	1.5
Cancer Death-rate per 1,000 of population	1.68
The Rateable Value in 1919 was	£33,099
The Assessable Value in 1919 was	£29,486

Adopted Acts, Bye-laws and Regulations in force within the District.

Infectious Diseases (Prevention) Act, 1890.

Public Health Acts Amendment Act, 1890. Part III.

Bye-laws or Regulations are in force respecting:—

Common Lodging-houses.

Slaughter-houses.

Cleansing of Footways.

Removal of House Refuse.

Cleansing of Privies.

Prevention of Nuisances.

Keeping of Animals.

Offensive Trades.

New Streets and Buildings.

Dairies, Cowsheds, Milkshops, etc.

Physical Features of the District.

The Biggleswade Urban District comprises an area of 4,647 acres, situated in the Ivel valley at the Eastern part of the County of Bedford, 9 miles South-East of Bedford, and surrounded by the Biggleswade Rural District. The larger and older part of the town itself lies between the River Ivel and the main line of the Great Northern Railway. The soil is chiefly gravel and sand. The Ivel is said to have its source near Baldock, in Hertfordshire, though its

principal branch rises on the North-Western slope of the Chiltern Hills a little to the North-East of Dunstable. It flows across the County in a North-Easterly direction, and after a course of 30 miles it joins the Ouse at Tempsford, some seven miles below Biggleswade. The ground-water is usually at a high level in this district.

Chief Occupations.

Market-gardening is the chief industry ; there is also a fairly extensive carriage and motor-body works.

VITAL STATISTICS.

Population.

Estimated population used for calculation of the birth-rate 5562.

Estimated population, used for calculation of the death-rate, 5339.

These figures have been supplied by the Registrar-General for the purpose of this Report.

The "death-rate population" excludes all non-civilian males, whether serving at home or abroad.

The "birth-rate (and marriage-rate) population" on the other hand is intended to include all the elements of the population contributing to the birth and marriage rates.

Birth-Rate.

The number of Births registered during the year was 88, being 38 males and 50 females. This is equal to a birth-rate of 15.82 per 1,000 of the population. This is the lowest rate recorded.

The birth-rate for 1918 was 16.6, and the average for the past ten years is 21.26.

Ten of the births registered during the year, viz., 5 males and 5 females, were illegitimate.

The birth-rate for the whole of England and Wales for the year 1919 was 18.5.

Death-Rate.

84 Deaths occurred among the civilian population belonging to the district, viz. : 41 males and 43 females, representing a death-rate of 15.73 per thousand of the population as compared with 21.75 for the year 1918. The average for the last ten years is 15.6.

The death-rate for England and Wales for 1919 was 13.8.

The following table gives the causes of death:—

	Males.	Females.
Enteric Fever	—	1
Influenza	1	2
Tuberculosis (Pulmonary)	3	4
Tuberculosis (other forms)	—	1
Cancer (malignant disease)	5	4
Meningitis	—	1
Organic Heart Disease	2	3
Bronchitis	3	5
Pneumonia (all forms)	3	2
Other Respiratory Diseases	—	1
Diarrhœa, &c. (under 2 years)	2	—
Cirrhosis of Liver	—	1
Nephritis and Bright's Disease.....	2	1
Puerperal Fever	—	2
Congenital Debility, &c.	4	—
Violence, apart from suicide	1	2
Suicide	1	—
Other defined diseases	14	12
Causes ill-defined or unknown	—	1
	41	43

Infant Mortality.

10 deaths occurred among children under one year of age, viz., 8 male and 2 female, which is equal to a death-rate of 113.6 per 1000 births, as compared with 98.9 for 1918. The rate for England and Wales for 1919 was 89.

The following were the causes of death:—

Congenital Debility	4
Gastro-Enteritis	2
Bronchitis	2
Influenza	1
Accidentally suffocated in bed	1

Zymotic Death-Rate.

I am glad to report that only 1 death occurred, the cause being Enteric Fever. This is equal to a death-rate of .18 per 1,000 of the population, as compared with 9 deaths and a corresponding rate of 1.8 for 1918.

SANITARY CIRCUMSTANCES OF THE DISTRICT.

Water Supply.

1237 houses are supplied by services from the mains of the Biggleswade Water Board, an additional 2 properties having been supplied during the year. The average quantity of water supplied per head per day (including all the water used for public purposes) is about 14.8 gallons.

The water is derived from a deep well in the lower green sand, and pumped to a large reservoir on Topler's Hill. The supply is constant, and ample in quantity, and recent chemical and bacteriological examination still shows it to be of excellent quality and in every way suitable for drinking purposes.

Drainage and Sewerage.

The Sewerage Scheme completed in the latter part of 1911 is in full working order. The total cost of the undertaking has been about £20,473.

Drainage of the town is effected by a modified "dual" system of sewers. The "soil" sewers take all the surface water from yards, etc., at back of houses, the other surface water being taken away by the old surface-water drains.

A complete system of watertight sewers has been installed; the pipes varying from 15 inches to 6 inches in diameter, constructed of glazed earthenware and provided with necessary manholes and lampholes. Most of the gradients provide for self-cleansing velocities, and the upper ends of most of the manholes are provided with flushing valves.

Storm water over-flow sewers have also been provided. On account of the levels it was found impossible to design a system to discharge by gravitation to any outfall site, so it was decided to overcome the difficulty by laying comparatively shallow gravitating sewers to four "lifting" or "Ejector stations," and thence to raise the sewage to the outfall works by means of Pneumatic Ejectors, and rising mains. One of these Ejector-stations has been placed at the junction of Shortmead Street and Sun Street, one at the junction of Mill Lane and St. Andrew's Street, one at the junction of Hitchin Street and Saffron Road, and another at the junction of Potton Road and Furzenhall Road.

The dry weather flow has been taken at 200 gallons per head per day; this is higher than the actual amount.

The ejectors at each station are in duplicate, and will be equal to all contingencies of flow. Two 30 h.p. gas engines driven with suction gas, and the necessary air-compressing apparatus for operating the Ejectors, have been installed at the Sewage Farm.

1,138 Dwelling Houses are connected with the public sewers. Two new connections were made during the year, and the matter is receiving attention with regard to the 20 remaining properties which it is possible to connect.

Sewage Disposal.

The Works occupy a site of over 8 acres of land between Furzenhall Road and the G.N. Railway. The Sewage is here treated by the Bacterial Method. Screening and Detritus Chambers, Sedimentation Tanks and Percolating Filters deal with the sewage before being discharged into the water-course. Adequate land is available for irrigation treatment should it be necessary. In stormy weather the dilute sewage beyond 3 times and up to 6 times the dry weather flow is dealt with in two storm-water tanks before passing to the water-course.

The amount of dry weather flow, when all connections are made, has been estimated to be about 120,000 gallons per day, and 6 times this amount can be dealt with at the Works.

The two Sedimentation Tanks have a total capacity of 127,425 gallons.

The two Storm-water Tanks have a total capacity of 92,400 gallons.

The four Percolating Filters are circular, 68 feet in diameter and an average depth of 5 feet of filtering medium. The total area is 1,614 square yards, and the capacity 2,680 cubic yards. The recommendations of the Royal Commission's Fifth Report have thus been complied with.

At the end of the year the amount of sewage being dealt with was about 52,300 gallons per day.

Closet Accommodation.

The following table shows the number and type of the Sanitary conveniences of the town and the number of conversions during the year 1919. These figures have been supplied to me by the Sanitary Inspector:—

	At the End of 1919.
Number of Privies with fixed receptacles)	
Ditto, with movable receptacles)	114
Water Closets provided with flushing cisterns	1138
Waste and hand-flushed water closets	0
Number of privies and pail-closets converted to the water carriage system during 1919	2

Scavenging.

The Council carries out the weekly removal of house refuse, and this is now working satisfactorily. This will be better still when all householders provide a proper sanitary dustbin. Many receptacles at present are quite inadequate for the purpose, but the matter is receiving attention with a view to remedying this defect.

Sanitary Inspection of District.

The following report has been supplied to me giving an account of the work carried out by your Sanitary Inspector during the year 1919. :—

REPORT OF SANITARY INSPECTOR upon action taken to remedy Sanitary defects.

Nuisances observed during Ordinary Inspections of the District. Preliminary notices for the abatement of nuisances were served as follows :—

Dirty Water Supplies	3
Dangerous Buildings	4
Defective Drains	17
Accumulations of Refuse	2
Filthy Closets	3
Overcrowding	1
Dirty and Delapidated Buildings	22
Foul Ditches	2
Miscellaneous	4

Seven statutory notices were served upon owners to provide proper drainage.

Two statutory notices were served to put premises in repair.

One statutory notice was served to remedy a dangerous building.

31 cases of Infectious Disease were investigated and 23 premises disinfected.

Slaughter Houses.

These have been periodically visited and the owners' attention directed to any nuisance. 32 inspections have been made.

Cowsheds and Dairies.

39 inspections have been made and two notices served for to remedy sanitary defects.

Bake-houses, Factories, Workshops and Workplaces.

These have been regularly inspected and cleansing notices served where necessary. 59 visits have been made.

Common Lodging Houses.

These have been regularly inspected and cleansing notices served where necessary.

Workshops and Factories.

25 visits were made in connection with these premises.

Food Inspections.

Foodshops and Stores have been periodically inspected and 7 quantities of foodstuffs have been condemned (canned beef 2, bacon 2, cheese 1, condensed milk 1, butter 1).

Dilapidated Buildings.

One summons was issued upon an owner for not complying with a Statutory notice with the result that the owner had to pay the expenses of the prosecution and given six weeks to carry out the work.

PREMISES AND OCCUPATIONS CONTROLLED BY BYE-LAWS OR REGULATIONS.

Common Lodging Houses.

There are three common lodging houses in the town; all are registered, and bye-laws are in force in respect of them. The premises are frequently inspected, and the necessary cleansing is carried out at the proper time.

Factories and Workshops.

There were 55 Workshops on the Register at the end of the year, and these have been regularly inspected, and cleansing notices served where necessary.

SCHOOLS.

The Medical Inspection of children in the Public Elementary Schools is carried out by Dr. Herdman, the School Medical Officer for the County of Bedford. Co-ordination of the work of the Medical Officer of Health and the School Medical Officer is provided for by arrangements which continue to work entirely satisfactorily.

It has not been necessary to close any of the schools during the past year for epidemics of infectious diseases.

FOOD

Milk Supply.

There are 10 persons registered as Cowkeepers or Dairymen.

During the year all Cowsheds and Dairies have been inspected. Notices of defects were served in the case of two premises, one required cleansing, and in the other structural repairs were necessary. In both instances the notices were complied with.

The condition of some cowsheds and dairies in the district is not satisfactory, and difficulty is being experienced in getting the necessary structural repairs, &c., carried out, but I am hopeful that more will be done during the present year.

Bakehouses.

There are 8 of these under inspection, none of which are underground, and generally speaking they are kept in a satisfactory condition.

Slaughter-houses.

There are 6 slaughter-houses in the district. The premises have been frequently visited, and the regulations found to be well observed.

Food Inspection.

As the result of inspection various quantities of canned food, condensed milk, cheese, butter and bacon have been condemned as unfit for human consumption.

PREVALENCE OF AND CONTROL OVER INFECTIOUS DISEASES

Infectious Diseases generally.

During the year 28 cases of infectious disease were notified as follows :—

Measles	1
Diphtheria	1
Enteric Fever	1
Puerperal Fever	2
Erysipelas	4
Scarlet Fever	11
Pneumonia	6
Malaria	1
Ophthalmia Neonatorum	1

The Diphtheria and 11 Scarlet Fever cases were removed to the Isolation Hospital.

Scarlet Fever.

The 11 cases were more or less evenly distributed throughout the year, and prompt removal to the Isolation Hospital and disinfection of premises were carried out in every instance, with the result that so far as is known no further cases came from the same source.

Puerperal Fever.

Two cases occurred within a few days of each other, both were attended by the same midwife, and I regret that both died.

Remaining Notified Cases.

No special mention is required with reference to the rest, with the exception that Pneumonia (Primary and Influenzal) and Malaria were only added to the list of notifiable diseases in January 1919. Enquiries were instituted in all cases, the malaria case contracted the disease abroad, and even if hospital accommodation had been available it would not have been wise to have attempted removal of the pneumonia cases.

Influenza.

There were a few cases of this disease in the early part of the year, but no epidemic as in the latter part of 1918.

Tuberculosis.

Notification of this disease is well observed.

13 notifications of Pulmonary Tuberculosis and 5 of "Other Forms" of Tuberculosis were received.

Each case was visited and the premises inspected.

Seven deaths from Pulmonary Tuberculosis were registered, and in each instance the premises were disinfected.

Smallpox.

No primary vaccinations or re-vaccinations have been performed by me under the Public Health (Smallpox Prevention) Regulations, 1917.

MATERNITY AND CHILD WELFARE

All the work under the above headings is carried out by the County Authority in this district.

SANITARY ADMINISTRATION

1. STAFF.

There is one Sanitary Inspector, who also holds the additional appointments of Surveyor, Water Engineer, &c., to the district.

2. HOSPITAL ACCOMMODATION.

Small Pox Hospital.

This is situated in the Urban District, in a field adjoining Langford Road, about a mile from Biggleswade Station. It is a corrugated iron building lined with match-board. It consists of 2 wards, each containing 6 beds. There is a bath-room and sink adjoining each ward, and earth closets are provided. There is an administrative block and a small mortuary. A caretaker resides on the premises.

The Hospital was erected in 1902 at a cost of £516.

General Isolation Hospital.

This is a permanent building situated on the Potton Road, about one mile from Biggleswade. It consists of an Administrative Block, Scarlet Fever Block, Diphtheria Block, Typhoid Block, Laundry, Disinfection Block and a Mortuary. A modern Washington-Lyon Steam Disinfector is installed.

The Hospital was erected in 1879 at a cost of £2,500, and enlarged in 1904 at a cost of £5,814.

The Administrative Block was enlarged in 1907 at a cost of £400.

Accommodation is as follows:—

Scarlet Fever Block	10 beds
Diphtheria ,,	8 ,,
Typhoid ,,	4 ,,

Total 22 ,,

The Hospitals are under the control of the Biggleswade Joint Hospital Board. The Medical Officer is Dr. R. C. Welsh, of Biggleswade. During the year 12 patients were admitted from the Urban District.

The present Administrative Block at the Isolation Hospital is unsatisfactory, and the Hospital Board is considering the proposal to adapt it for the purpose of "observation" and "discharge" wards, which are greatly needed, and to build an entirely new block for administrative purposes.

Bacteriological Examinations.

Arrangements are made whereby medical men practising in the town can obtain free Bacteriological examinations in cases of Diphtheria, Typhoid Fever, Tuberculosis and Meningitis. These examinations are carried out by the Lister Institute.

HOUSING.

There are roughly at the present time about 1,280 houses in the district, of which I estimate that 75 per cent. are working class houses. So far as I am aware no new houses were erected or in course of erection during 1919, and none were erected between January 1st, 1915, and December 31st, 1918. The average annual number erected during the five years before the war was 12, the total number including the 22 cottages erected by you in 1913.

The estimated population is about 5,500, and so far as my knowledge goes there is a prospect of considerable increase when more houses are provided.

The existing shortage of houses to be made up in the course of the next two or three years is in my estimation about 400, but the actual number will depend on what owners of existing properties are prepared to do.

Land has been, or is in the course of being obtained for erection of about 225 houses, and at the time of writing this report, tenders are being asked for the erection of 40 houses in accordance with plans prepared for one of the sites.

There are at least 20 houses in the district that are overcrowded, and probably there are others of which I do not know at the moment. Lack of empty houses prevents this evil from being dealt with at present, and I am in the unfortunate position of having no remedy until new houses are erected.

The most serious matter, however, is the condition of existing properties. In the survey of the district which is going on continuously, there are no fewer than 250 houses which in my opinion are unfit for habitation, and cannot be made so. The following are the chief causes of unfitness:—

Faulty construction.

Dampness (due to lack of damp proof course, ground floor rooms below street level, &c.).

Decaying roof timbers.

Lack of free circulation of air (due to houses built too close together),

Exclusion of sunlight (due to smallness of window area and obstructive buildings).

To ask owners to do minor repairs is all that can be done at present, as the only real remedy is closure and demolition, which can only be undertaken when other accommodation is available.

The following list gives the particular area of the town and the number of houses I consider unfit and not able to be made so:

Cowfairlands	37
Anchor End	24
Sun Street—	
Sun Place	10
York Terrace	10
Between Shortmead and Chapel Fields	16
Shortmead Street (West of)	10
Stratton Street—	
Well's Yard	4
Rootham's Twitchell	4
Stratton Street	3
Back Street (East)	24
Back Street (West)	15
Victoria Place	15
	<hr/>
Palace Street and Foundry Lane	65
Hitchin Street—	28
East Side	7
West Side	20
	<hr/>
St. Andrew's Street, Ivel Terr. and Mill Lane ...	27
	24
	<hr/>
	251
	<hr/>

It was not possible to make a single Closing Order during 1919 owing to lack of alternative accommodation, although the above large number will ultimately have to be dealt with in this way.

Roughly, the housing needs of the area are as follows:—

To meet unsatisfied demand (taking account of over-crowding and growth of population)	50
Replace unfit dwellings	250
Replace other houses which although not at present unfit, fall below standard	about 50
Meet deficiencies arising from probably industrial development, &c.	about 50
	<hr/>
Total	400
	<hr/>

I must confess to some disappointment that the Housing Scheme, which has been in existence many months, is not more advanced than it is, and would ask you to push on with it as fast as you are able, as the improvement of housing conditions generally in your district depends at the moment on the erection of new houses, and until some of these are provided it is not possible to effect more than quite minor repairs.

